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## Abstract

A time slot synchronizer that includes a sampler, which is configured to successively sample a baseband signal. The baseband signal is divided into a number of frames, and each frame is divided into a plurality of symbols. The sampler divides each symbol into a plurality of sample bins and generates a first sample group from a first frame by sampling each symbol in the first frame. The sampler uses a predetermined first and second sample bin for sampling the first frame. Next, the sampler generates a second sample group from a second frame by sampling each symbol in the second frame in a third and fourth sample bin. The third and fourth sample bins, however, are shifted a certain number of sample bins relative to the first and second sample bins, respectively.